

OWNER'S GUIDE

FIFTY CENTS

**MODEL
NOS.**

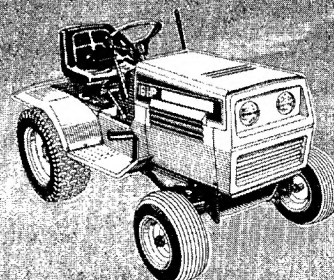
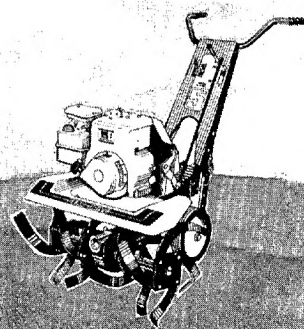
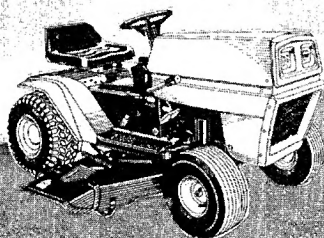
219-386A

219-388A

**ASSEMBLY
OPERATION
PARTS
MAINTENANCE**

**5 & 8-H.P.
4-SPEED
CHAIN DRIVE
TILLERS**

**IMPORTANT:
READ SAFETY RULES
& INSTRUCTIONS**



LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges under this warranty must be paid by the purchaser unless return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

WARNING TO PURCHASERS OF INTERNAL COMBUSTION ENGINE EQUIPPED MACHINERY OR DEVICES IN THE STATE OF CALIFORNIA

The equipment which you have just purchased does not have a spark arrester. If this equipment is used on any forest covered land, brush covered land, or grass covered unimproved land in the State of California, before using on such land, the California law requires that a spark arrester be provided. In addition, spark arrester is required by law to be in effective working order. The spark arrester must be attached to the exhaust system and comply with Section 4442 of the California Public Resources Code.

IMPORTANT

It is suggested that this manual be read in its entirety before attempting to assemble or operate. Keep this manual in a safe place for future reference and for ordering replacement parts.

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see operating section of this manual for proper fuel and amount.

Your tiller is a precision piece of power equipment, not a play thing. Therefore, exercise extreme caution at all times.

SAFE OPERATION PRACTICES FOR TILLERS

1. Read the Operating and Service Owner's Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
2. Never allow children to operate a power tiller. Only persons well acquainted with these rules of safe operation should be allowed to use your tiller.
3. Keep the area of operation clear of all persons, particularly small children and pets.
4. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
5. Do not wear loose fitting clothing that could get caught on the tiller.
6. Do not start the engine unless the shift lever is in the neutral (N) position.
7. Do not stand in front of the tiller while starting the engine.
8. Do not place feet and hands on or near the tines when starting the engine or while the engine is running.
9. Do not leave the tiller unattended with the engine running.
10. Do not walk in front of the tiller while the engine is running.
11. Do not fill gasoline tank while engine is running. Spilling gasoline on hot engine may cause a fire or explosion.
12. Do not run the engine while indoors. Exhaust gases are deadly poisonous.
13. Be careful not to touch the muffler after the engine has been running, it is hot.
14. Before any maintenance work is performed or adjustments are made, remove the spark plug wire and ground it on the engine block for added safety.
15. Use caution when tilling near buildings and fences, rotating tines can cause damage or injury.
16. Before attempting to remove rocks, bricks and other objects from tines, stop the engine and be sure the tines have stopped completely. Disconnect the spark plug wire and ground to prevent accidental starting.
17. Check the tine and engine mounting bolts at frequent intervals for proper tightness.
18. Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
19. Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

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To prepare your tiller for operation, the following steps are necessary:

1. Handle Panel Attachment
2. Drive Control Linkage Connections
3. Throttle Control Lever
4. Depth Bar Attachment
5. Tine Attachment
6. Tail Piece Attachment
7. Engine Operation

Before any step is undertaken, the instructions for that step should be read through.

TOOLS REQUIRED: See Figure 1

1. (1) 1/2" Socket, open or box wrench.
2. (2) 9/16" Socket, open or box wrench.
3. (1) 1/4" Flat Screwdriver.

MATERIALS REQUIRED:

1. Funnel (for gas and oil-NOTE: DO NOT MIX)
2. 5-H.P. model—one quart SAE-30 heavy duty detergent oil.
8-H.P. model—two quarts SAE-30 heavy duty detergent oil.
3. Gas (regular) leaded or low leaded
4. Cleaning rag

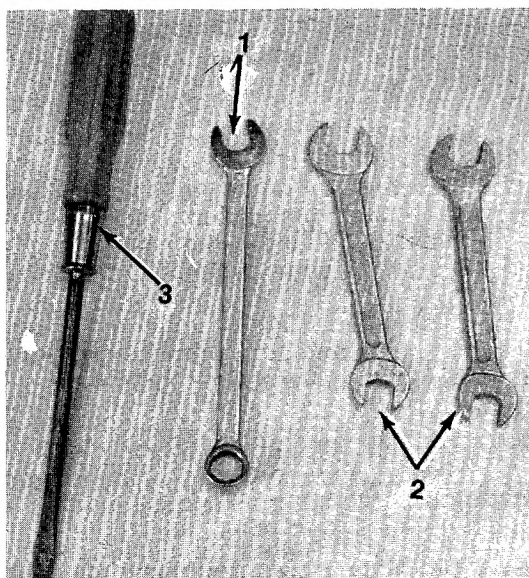


FIGURE 1.

LIST OF PARTS IN CARTON: See Figure 2.

Tiller

Handle panel assembly
Depth bar attachment
Tail piece attachment
Control rod
Hardware pack
Shift Lever

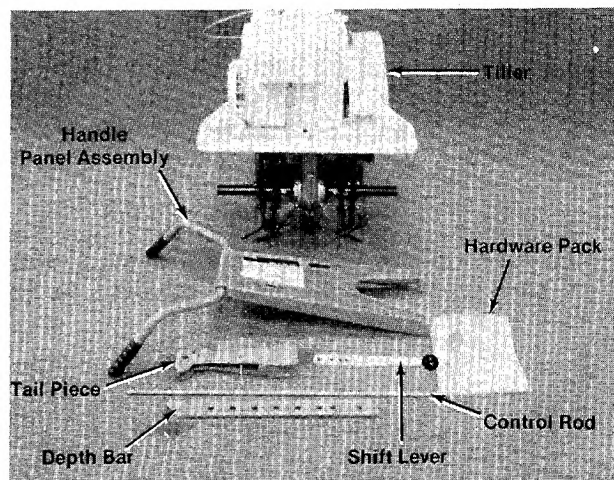


FIGURE 2.

LIST OF CONTENTS IN HARDWARE PACK:

- A (1) "U"-Clevis Pin
- B (2) Self Tapping Screws #8 x .62"
- C (4) Hair Pin Cotter
- D (1) Adjustment Ferrule
- E (1) Hex Center Locknut 5/16-18 Thread
- F (2) Belleville Washers
- G (1) Spring
- H (1) Hex Locknut 5/16-18 Thread
- I (2) Clevis Pins
- J (1) Clevis Pin
- K (2) Spring Pin
- L (4) Hex Screw 3/8-16 x 1.00" Long
- M (2) Hex Screw 3/8-24 x 1.00" Long
- N (4) Lockwashers 3/8"
- O (4) Hex Nut 3/8-16 Thread
- P (2) Belleville Washers 3/8"
- Q (2) Lockwashers 3/8"
- R (2) Hex Nuts 3/8-24 Thread
- S (1) Belleville Washer
- T (1) Internal Cotter Pin
- U (1) Cotter Pin
- V (2) Flat Washer

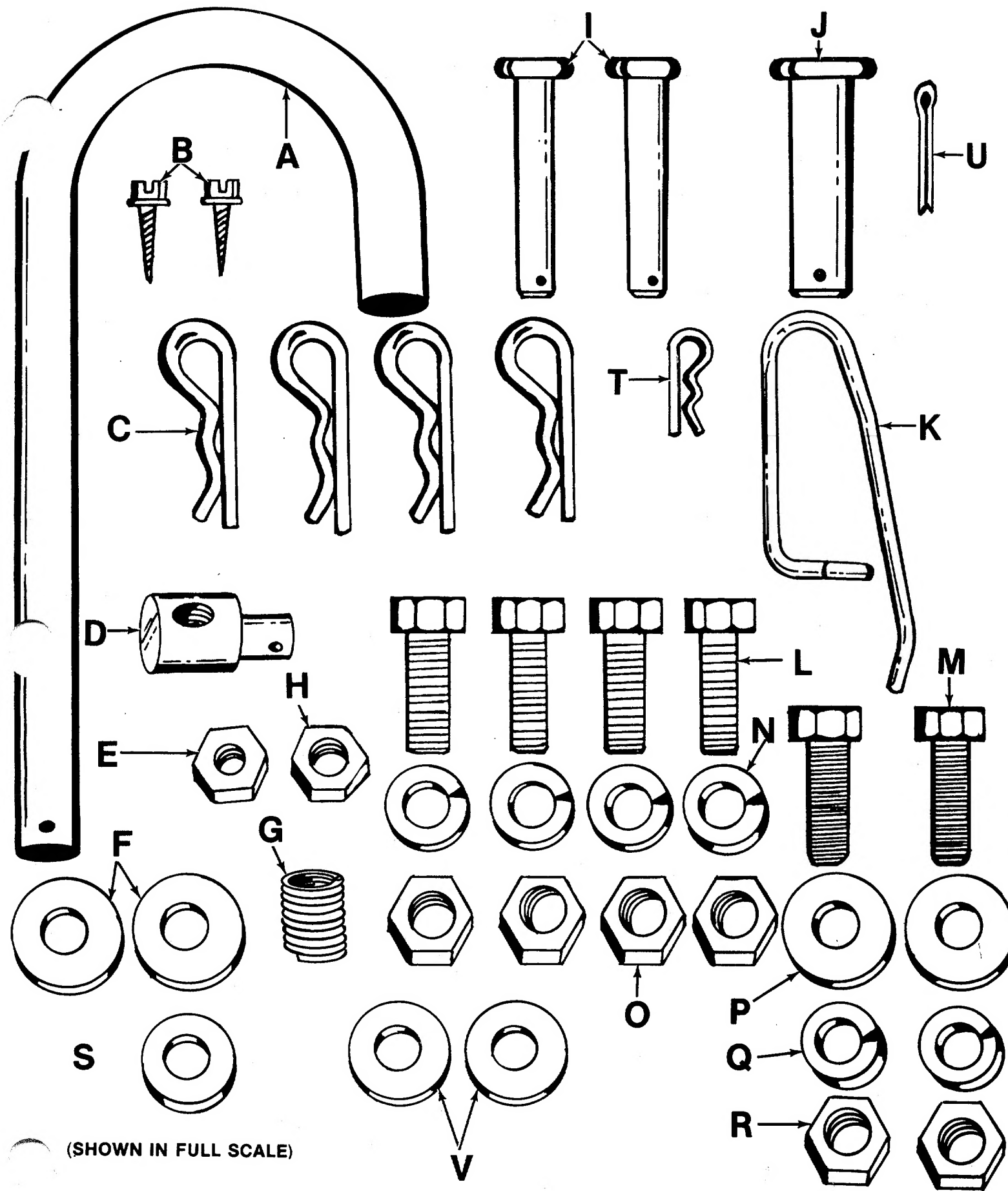


FIGURE 3.

Assembly Instructions

1. Tail Piece Attachment.

Slide the tail piece into the chassis and secure with "U" clevis (A) and spring pin (K). See figure 4.

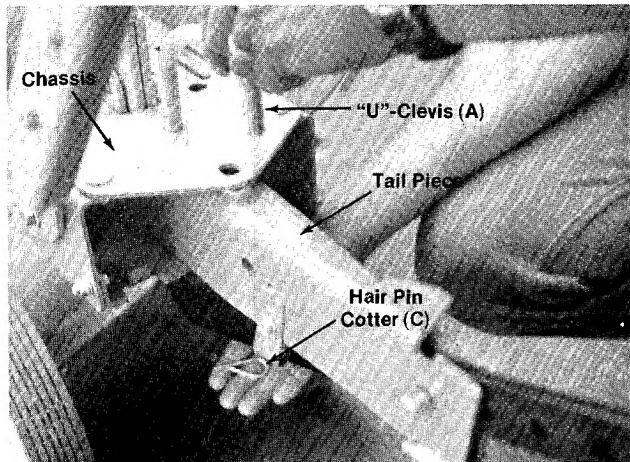


FIGURE 4.

2. Depth Bar Attachment.

Slide the depth bar into the tail piece to desired depth and secure with clevis pin (J) and spring pin (K). See figure 5.

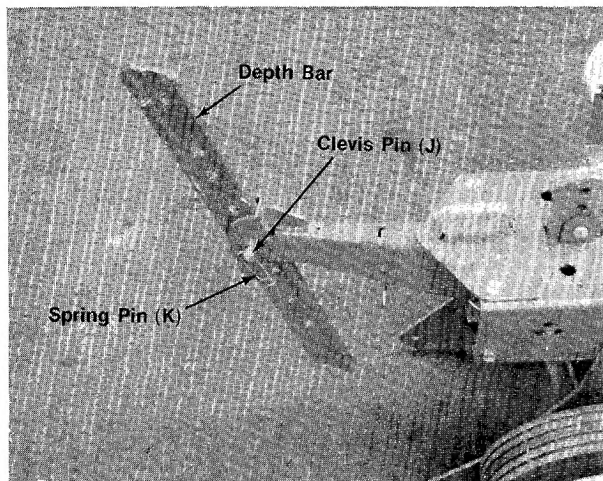


FIGURE 5.

3. Handle Panel Attachment.

For shipping purposes, the handle mounting brackets are pivoted down. Pull handle mount brackets up so that the top hole in bracket lines up with one of three holes in chassis. See figure 6.



NOTE

This is the average handle height. Secure with hex screw 3/8-24 x 1 3/4" long, lockwasher and hex nut.

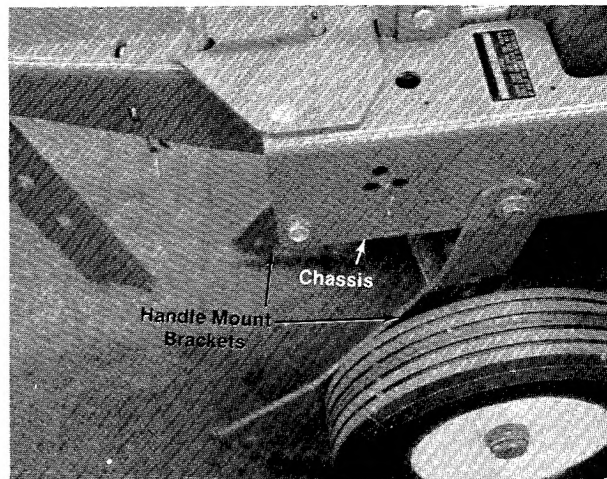


FIGURE 6.



NOTE

This tiller is a variable speed unit. Any movement in the handle (after assembly) may change your speed. The handle mount brackets **must** be as tight as possible. See figure 7.

- Place hex screw through handle mount bracket and chassis.
- Secure with lockwasher (Q) and hex nut (R) on the inside of chassis. See figure 7.

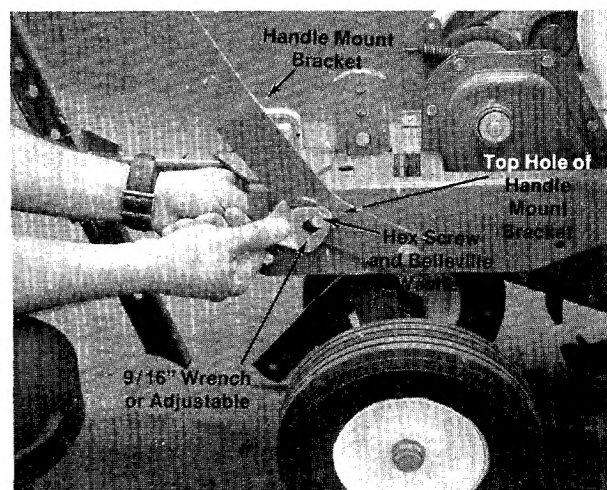


FIGURE 7.

The handle panel is attached by sliding it down over the handle brackets on the chassis and installing four hex screws (L) in the lower holes of the handle panel. Four hex screws (L), lockwashers (N) and hex nuts (O) will be found in the hardware pack. Lockwashers and hex nuts are tightened from the inside of handle panel, tighten securely. See figure 8.

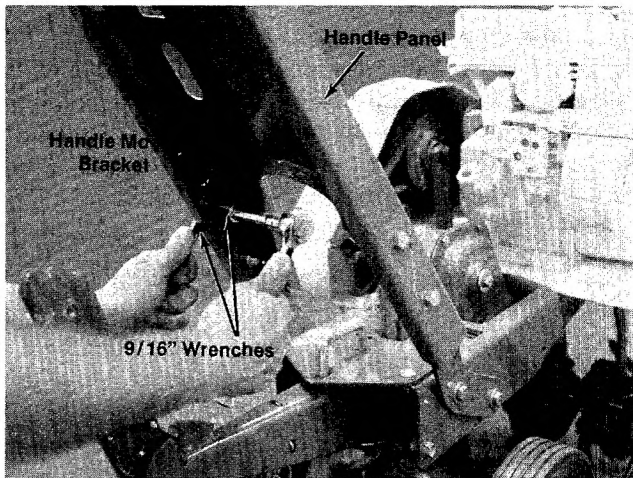


FIGURE 8.

4. Shift Lever Assembly.

The shift lever is mounted to the handle panel in the following steps.

- Place the top hole of the shift lever over weld bolt on handle panel. See figure 9.
- Place belleville washer (S), spring (G) over weld bolt as shown in figure 9.
- Secure with hex locknut (H). See figure 9.



Tighten hex locknut just to the point the spring starts to compress.

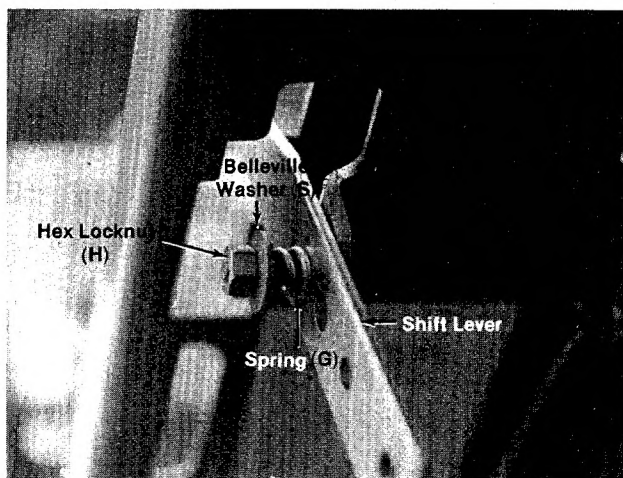


FIGURE 9.

5. Throttle Control Lever.

The throttle control is already attached to the engine.



NOTE

The throttle control has four holes in the lever bracket. The holes on the outside edge are to be used for mounting on this unit. See figure 10.

Place throttle control lever up through the handle panel and secure with two (2) self tapping screws (B), using a 1/4" flat screwdriver. See figure 11.

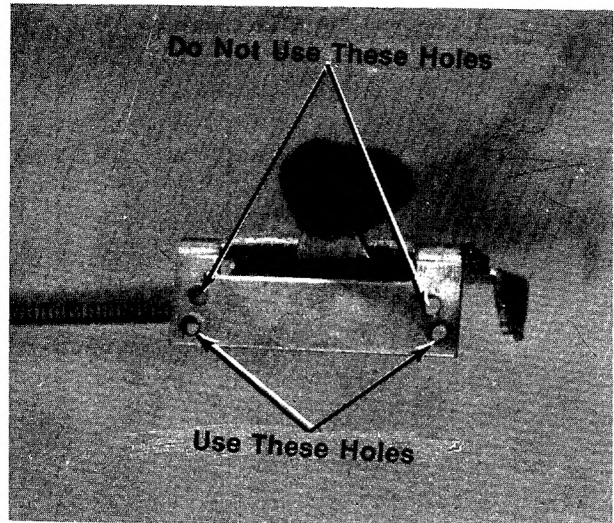


FIGURE 10.

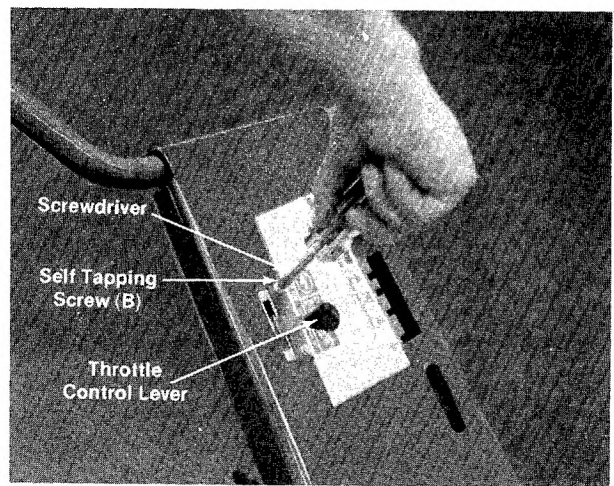


FIGURE 11.

6. Clutch Control Rod.

- Thread adjustment ferrule (D) on end of control rod. See figure 12.
- Hook other end of control rod into idler arm and secure with hair pin cotter (C). See figure 13.
- Place shift lever in 1st speed position and thread ferrule up or down control rod so that ferrule lines up with hole in shift lever. See figure 12. Secure ferrule with flat washer and hair pin cotter (C).



NOTE

Ferrule and control rod must be adjusted each time you change the handle height.

CLUTCH ROD AND ENGINE ADJUSTMENT

When engaging the Clutch Rod, you may encounter difficulty in putting the unit in reverse. This may arise when the Friction Disc on the Variable Speed does not make contact with the Engine Disc. To remedy this problem, loosen the four Hex Screws securing the engine to the Tine Shield and the Frame until you are able to slide the engine back a little in the slots in the Frame. Then tighten the Hex Screws, start the engine and put unit in reverse. When the Spring Idler makes contact on the Variable Speed Pulley or Transmission Input Pulley, engine is too far back and should be moved forward.



NOTE

Changing the handle position may require readjustment of the clutch rod.

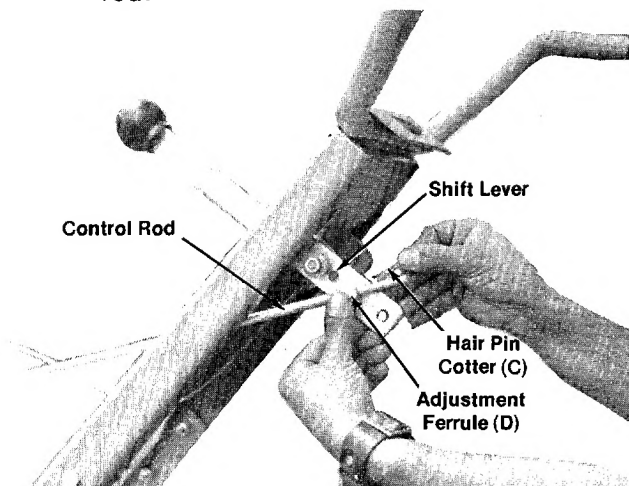


FIGURE 12.

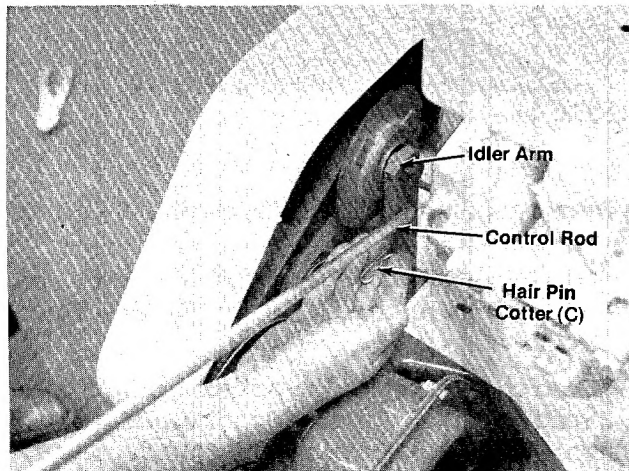


FIGURE 13.

7. Tine Attachment.

The inner tine assemblies are installed at the factory. The outer tine assemblies are inverted. See figure 14. The right hand outer tine assembly has been removed, inverted and slid onto the left hand side for shipping only. The same has been done with the left hand outer tine assembly.

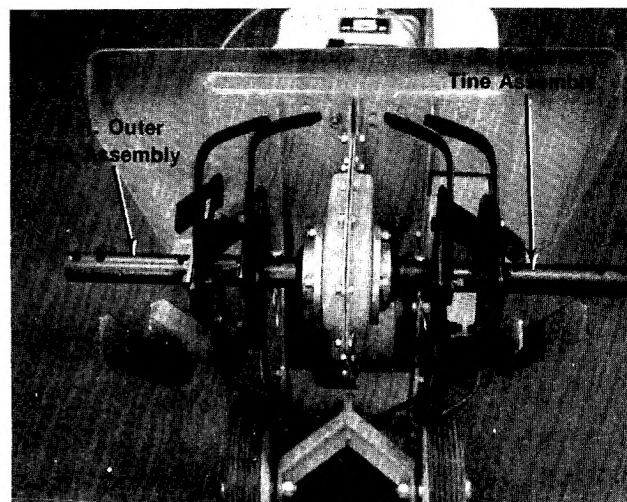


FIGURE 14.

Remove the outer tine assemblies and turn around so that the sharp edge of the tines enter the soil first. Secure with clevis pins (I) and cotter hair pins (C). See figure 15. See cultivating page 11.

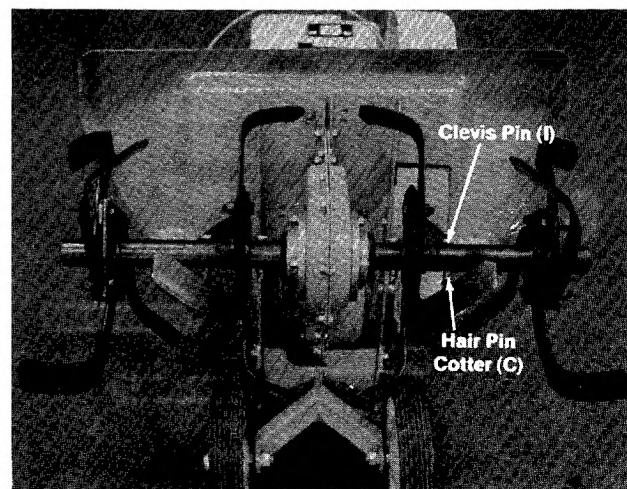


FIGURE 15.

ENGINE OPERATION

BEFORE STARTING ENGINE:

1. Before starting, fill crankcase with oil or to top of filler neck. Be sure that the engine is level. See engine manual for correct amount.
2. Use S.A.E. No. 30 MS, SC, SD or SE oil. If not available, use Multi-grade oil (S.A.E. 10W-30W) MS, SC, SD or SE (NOTE: Below 32°F. use 10W) MS, SC, SD or SE.

3. Change oil after first 2 hours of operation and every 25 hours thereafter. Check oil every 8 operating hours.

TO START ENGINE:



CAUTION

BE SURE NO ONE IS STANDING IN FRONT OF THE TILLER WHILE THE ENGINE IS RUNNING OR BEING STARTED.

1. Place the shift lever in the neutral (N) position. See figure 16.
2. Choke Engine. See engine manual packed with tiller.

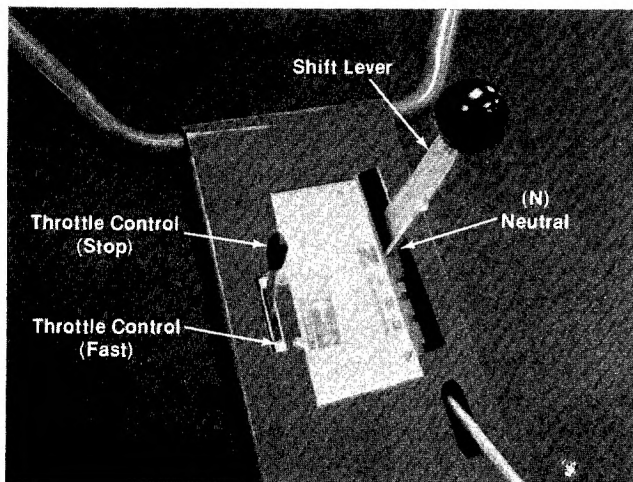


FIGURE 16.

3. Move the throttle control lever forward to FAST POSITION. See figure 16.
4. Stand at side of the Tiller, grasp the starter handle and pull out rapidly. Return it slowly to the engine. Repeat if necessary.



NOTE

If engine is warm, start with the control in the "FAST" position (e.g. do not choke).

5. TO STOP ENGINE: Move control lever to "STOP" position. See figure 16.

HOW TO USE YOUR TILLER

Your tiller has a variable speed pulley. This allows you to change gears First (1) through Fourth (4) without stopping. The gear shift lever is located on the top left hand side of handle panel. You have four (4) forward speeds, Neutral (N) and Reverse (R).

- A. Forward Speeds: First and second speeds are generally used for tilling sod or soil which has not been tilled before. Third and fourth speeds are usually used for fine tilling or cultivating. The soil conditions in your area will determine the speed you will want to use. If you stop your tiller or stall the engine while in a forward speed, you **must** proceed as follows:

- 1.) Remove the spark plug wire and ground on engine block.
- 2.) Pull the recoil starter rope, and at the same time pull back on gear shift lever. Pull the rope out as many times as it takes to move the gear shift lever into neutral (N) position. **Do Not** force shift lever back into neutral at any time.
- 3.) Place the spark plug wire back on the spark plug. Start your tiller.
- 4.) Push down on handle so that the tines do not touch the ground.
- 5.) Move the gear shift lever through the forward speeds, neutral and reverse. Readjust control rod if necessary.

- B. Neutral (N): The neutral detent on the handle panel is used when starting, stopping the tiller and going from a forward speed to reverse.

- C. Reverse (R) Gear: The reverse gear is a dead-man type. That means if you put the tiller into reverse to back up, or to unclog the tines and you let go of gear shift lever, the reverse motion will **stop**. Reverse will **only** work when you pull the gear shift lever back and hold it in that position.

TRANSPORT WHEEL AND DEPTH BAR ADJUSTMENT

The Tiller is shipped with the wheels adjusted such that the unit sits level. During digging as the tines enter the ground and the front of the Tiller lowers, the wheels must be raised to level the unit. This is essential for proper engine operation. This adjustment is made by removing the clevis pin and hair pin cotter from wheel yoke, raising the wheels to the desired height, and replacing the clevis pin and hair pin cotter. See figure 17. The working depth of the tiller is determined by the position of the depth bar. Remove the clevis pin and spring pin to raise or lower depth bar.

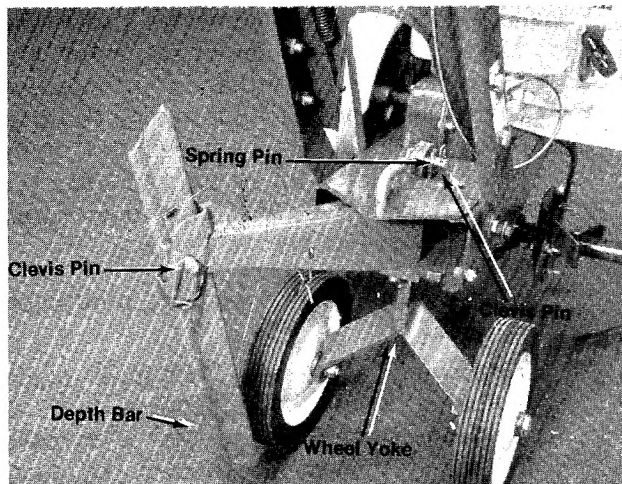


FIGURE 17.

CONTROLLING SPEED AND TILLING DEPTH:

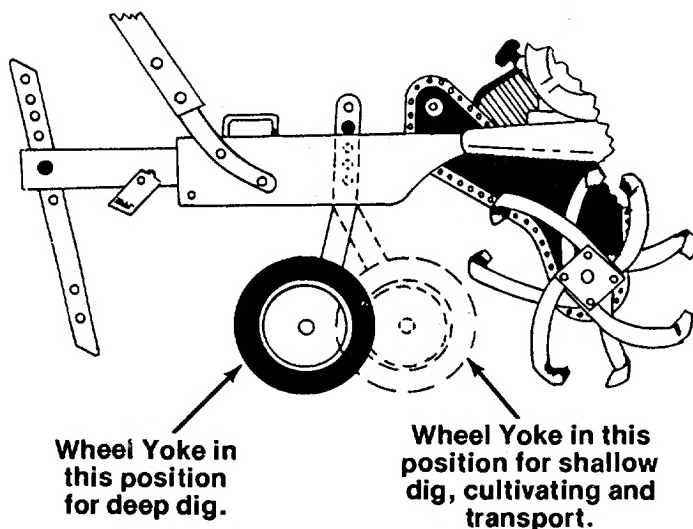


FIGURE 18.

1. Wheel Yoke Adjustment: By placing wheel yoke so that the wheels are forward, (nearest point between wheels and tines). See figure 18. This position will allow for shallow tilling, cultivating, transport and also the forward speed will increase. By turning the wheel yoke around (farthest point between wheels and tines) this will allow for deep tilling, and the forward speed will decrease. See figure 18.

2. Depth Bar Adjustment: The depth bar acts as a brake for the tiller and controls the depth and speed at which the machine will operate. See figure 19.

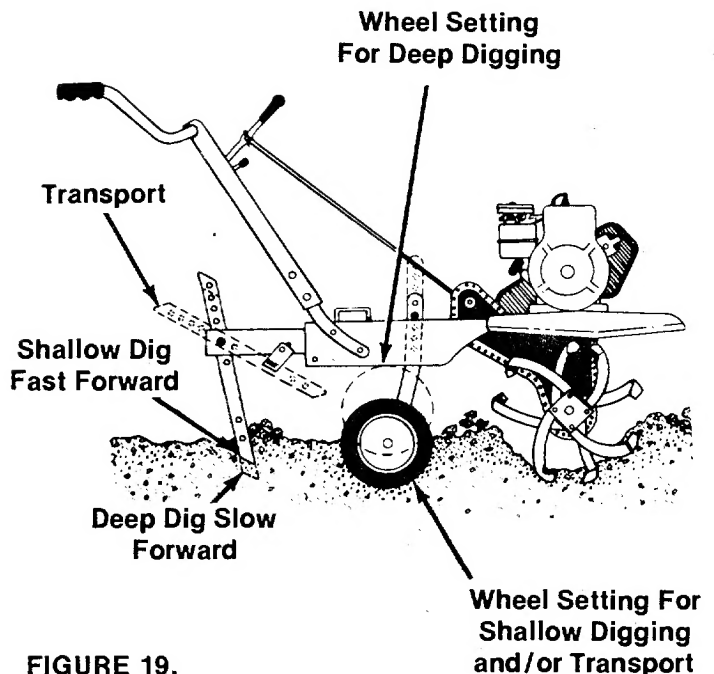


FIGURE 19.

By increasing the depth of the depth bar, the forward speed of the machine is reduced, and the working depth is increased. When the depth bar is raised, the working depth of the machine is reduced and the forward speed is increased. The working depth of the machine may be predetermined by setting the depth bar and wheels so that the wheels are about four inches from the ground when the tines and depth bar are resting on the ground. This setting will permit a working depth of about four inches. Use maximum engine speed for deep tilling. When presetting the working depth, the handles should be a little above waist height because the complete tiller will be lower when the tines and depth bar penetrate the ground. The best method will be determined by the soil condition. In some soils, the desired depth is obtained the first time over the garden. In other soils, the desired depth is obtained by going over the garden two or three times. In the latter case, the depth bar should be lowered before each succeeding pass over the garden, and passes should be made across the length and width of the garden alternately. Rocks which are turned up should be removed from the garden area.

3. Handle Pressure: Further control of tilling depth and travel speed can be obtained by variation of pressure on the handles. A downward pressure on the handles will reduce the working depth and increase the forward speed. An upward pressure on the handles will increase the working depth and reduce the forward speed. The type of soil and working conditions will determine the actual setting of the depth bar and the handle pressure required.

4. **Throttle Control:** The throttle control lever is located on the left side of handle panel.



Left hand side is determined from the operator's position standing behind the tiller.

The throttle control lever adjusts the engine speed. It also gives finger tip control of the carburetor and magneto stop switch. With the throttle control knob pushed completely forward, the carburetor is in START position. Pulling the throttle control back slightly adjusts the engine speed to FAST. Pulling the throttle back further reduces the engine speed to SLOW. When the throttle is pulled completely back, the magneto stop switch grounds out the spark and stops the engine. Move the throttle control to slow when transporting the tiller. When the tiller is being moved to or from the garden, the depth bar should be pivoted forward until it engages the depth bar spring pin. The machine may be moved under its own power, without damaging grass areas as long as it is allowed to move freely. If the operator holds back, it will start to dig.

CULTIVATING

For cultivating, a two to three inch depth is desirable. Setting the wheels and depth bar so that the wheels are about two inches above the ground, while the tiller is resting on the tines and depth bar, will allow the machine to work at cultivating depth. The throttle should be set to control forward movement to a slow walking speed. With standard tines, the working width of the machine is 26 inches. For cultivation, this may be reduced to 14 inches by removing the outer tines. See figures 20 and 21.

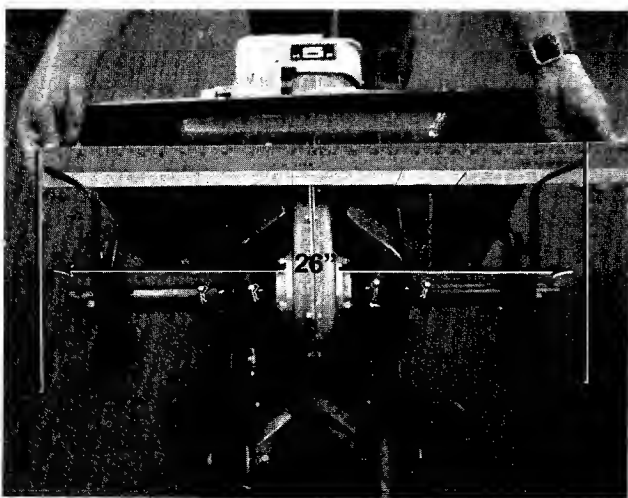


FIGURE 20.

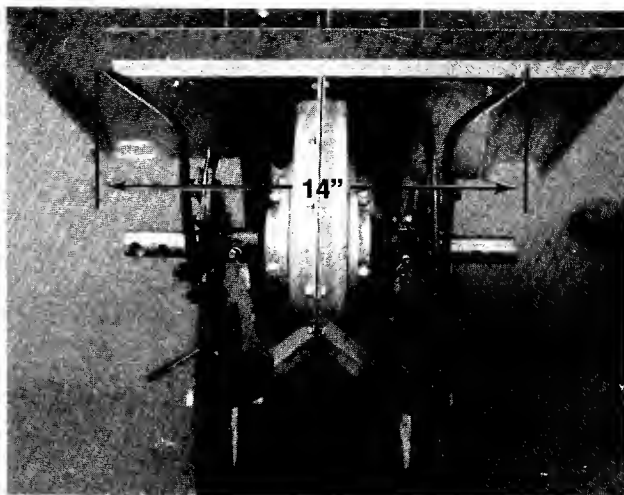


FIGURE 21.

In laying out plant rows be sure to allow enough width to permit cultivation between the rows.

In growing corn or similar crops, check-row planting will permit cross cultivation and practically eliminate hand hoeing. The tiller has many uses other than tilling and cultivating a garden. One of these is the preparation of lawn area for seeding. The tiller will prepare a deep seed bed which will be free of hard untilled spots, allowing a better stand of grass to grow. The tiller is very useful for loosening hard soil for excavation with a shovel. No tedious hand pickwork will be necessary. Your tiller may be used for mixing compost in the pile, or for mixing it with the soil in your garden. This should be done after the soil has been broken to the full working depth. The compost should be worked in to a depth of six to eight inches. This may be done by working the length of the garden, and then by mixing separate passes across its width. The addition of decayed organic matter will substantially increase the fertility of your garden. For proper decaying action, fertilizer should be applied and worked in with the mulch materials. The breaking up of the leaves and straw and the mixing of it with the several inches of soil cause the soil to hold moisture longer and allow proper aeration of the plant root system. This also retards the growth of weeds.

The U.S. Department of Agriculture and various state and local agencies offer published booklets and expert advice on all phases of gardening. They should be consulted regarding soil information, planting dates, and the most satisfactory varieties of crop for your particular area.

BELT REPLACEMENT

If belt replacement is required, order belt or belts by part number from your authorized dealer listed on the back of your Owner's Manual.

Front Drive Belt—Part No. 754-0232 ½" x 20" Lg.
(5 H.P. Model)

Part No. 754-0233 ½" x 21" Lg.
(8 H.P. Model)

Rear Drive Belt—Part No. 754-0231 ½" x 28" Lg.

NO SUBSTITUTES:

Your tiller has been engineered with the above belts and replacement should not be made with an off-the-shelf belt. The above belts are of special material (Kevlar Tensile).

REMOVING AND REPLACING THE FRONT DRIVE BELT.

1. Remove the belt cover by removing the two (2) self tapping screws, and one (1) hex nut. See figure 22.

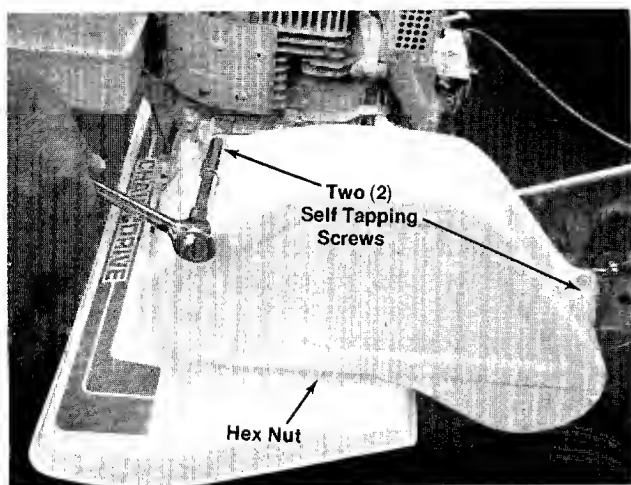


FIGURE 22.

2. Push the shift lever forward and lift off belt from Variable Speed Pulley and Engine Pulley. See figure 23.

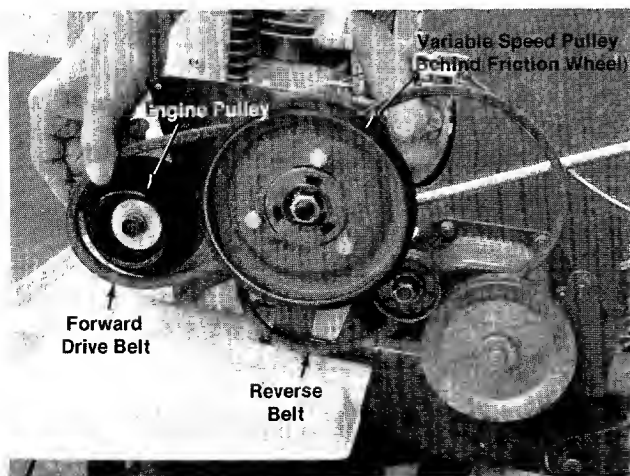


FIGURE 23.

REMOVING AND REPLACING THE REAR DRIVE BELT.

1. To remove the rear drive belt you must remove the front drive belt first. See removing the front drive belt section above.
2. Push forward on the idler and lift belt off the chain case pulley, idler pulley and variable speed pulley. See figure 24.

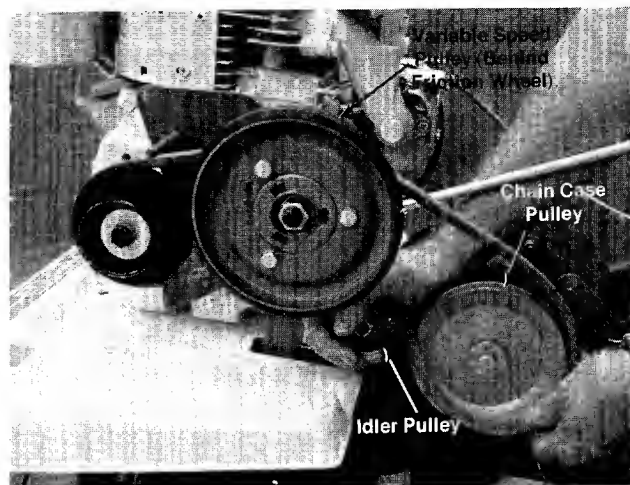


FIGURE 24.

REPLACE BELTS IN THE REVERSE ORDER.

When belts are replaced, it may be necessary to readjust the clutch rod and engine. See clutch rod and engine adjustment.

CARE AND MAINTENANCE

Chain Case:

The chain case is pre-lubricated and sealed at the factory. It requires no checking unless the chain case is disassembled. To fill with grease, lay the left half of the chain case on its side, add 14 ounces of Plastilube #1 grease and assemble the right half to it. This grease can be obtained at your nearest authorized dealer listed on the back of this manual.

Engine:

Refer to engine manual packed with your tiller.

SPARK PLUG:

1. Remove the spark plug each time you change the oil and inspect it. See figure 25.
 - A. The electrodes should be kept clean and free OF CARBON. The presence of carbon or excess oil will greatly deter proper engine performance.

- B. If possible, check the spark plug gap (area between electrodes) using a wire feeler gauge. This specification should be .030.
2. If you need a spark plug refer to the yellow pages of your phone book under "Engines Gasoline" for an authorized dealer.

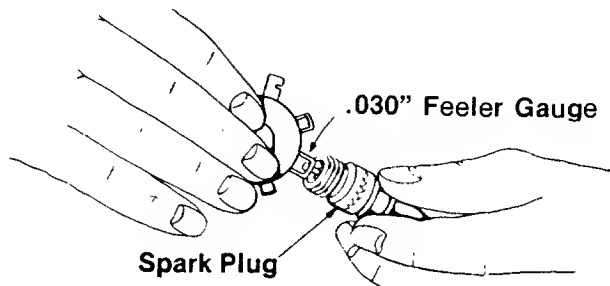


FIGURE 25.

STORAGE

If the tiller is not to be used for a while, the following procedure should be followed. The tines, depth bar, gear case and wheels should be cleaned of all dirt. It is very important that the unit be stored in a level position to prevent engine oil from draining into the cylinder head cavity.

Engines on tillers to be stored between seasons should be completely drained of fuel to prevent gum deposits forming on essential carburetor parts, and fuel tank.

- (a) All fuel should be removed from fuel tank. Run the engine until it stops from lack of fuel. The small amount of fuel that remains in the sump of the tank should then be removed by absorbing it with a clean dry cloth.
- (b) Clean dirt and chaff from cylinder, cylinder head fins and blower housing.
- (c) Remove spark plug, pour 2 or 3 tablespoons of S.A.E.-30 oil into cylinder and pull crank cord out slowly to distribute oil. Replace spark plug.

Just as your automobile needs professional mechanical maintenance from time to time, so does your air cooled engine. Cleaning and adjusting of the carburetor and periodic replacement of the spark plug and ignition points is made necessary by NORMAL use.

Professional Air Cooled Engine Service is as close as your telephone book.

A yearly check-up or tune-up by an authorized engine dealer is a good idea to avoid breakdowns or delay...do it at the end of the season, then you're ready for the next.

TILLER WINTERIZING INSTRUCTIONS FOR USE WITH SNOW BLADE:

1. For cold weather (below 32°F.), drain oil from tiller engine crankcase and replace with SAE 10W or 10W-20W detergent oil.
2. Replace any remaining fuel on hand or in the engine fuel tank with a fresh supply of winter grade fuel. Winter fuels contain additives for faster starts. Keep fuel tank full.

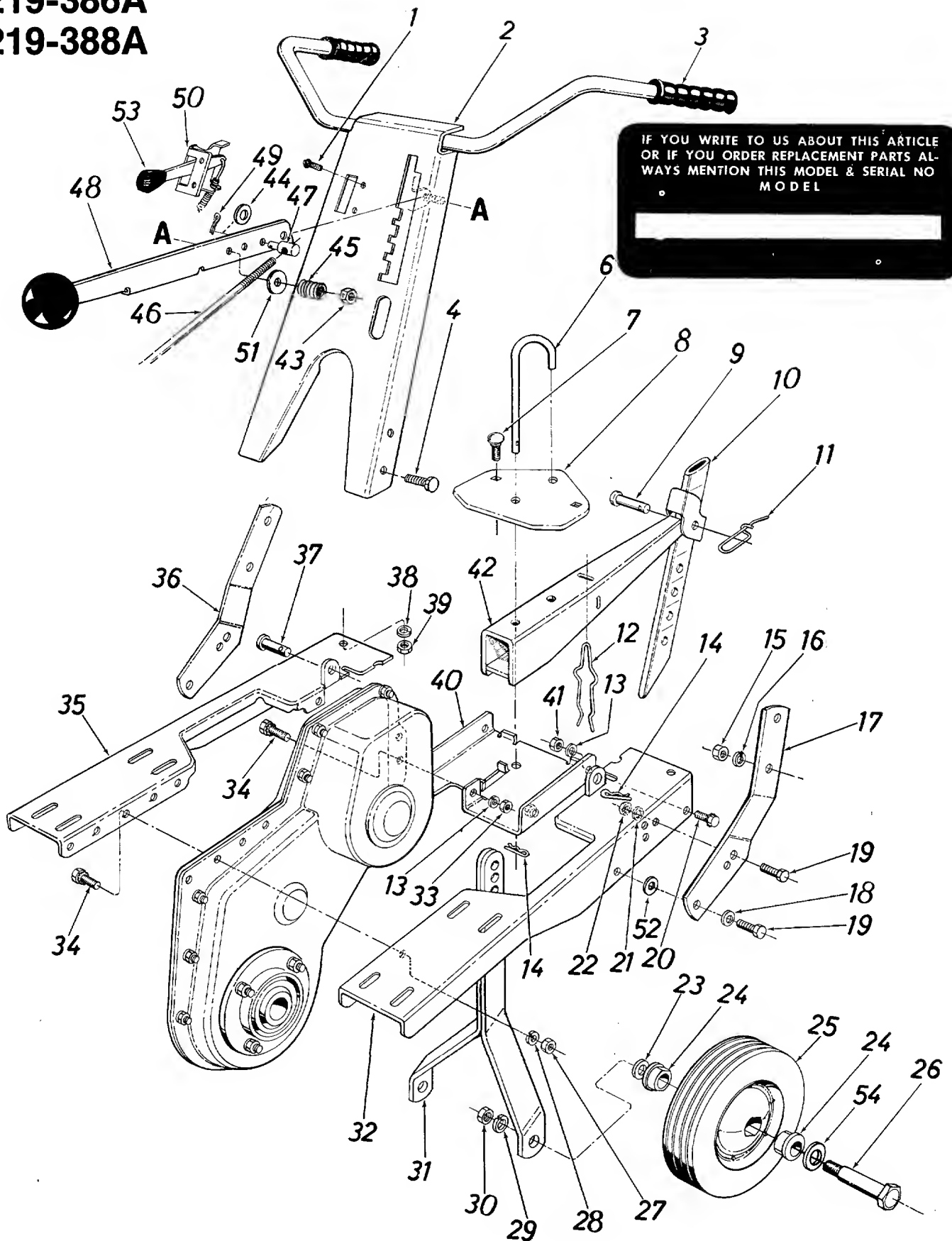


NOTE

It may be necessary to enrich the carburetor idle and high speed jets 1/8 to 1/4 turn (counterclockwise) for good performance.

3. In the spring of the year, before the tilling season, be sure to change engine oil back to SAE 30W detergent oil.

219-386A
219-388A



PARTS LIST FOR MODELS 219-386A AND 219-388A

REF.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	710-0160		Hex Wash. Hd. AB-Tapp. Scr. #8 x .62" Lg.*	N	31	06813	—463	Wheel Brkt. Ass'y.	N
2	04903	—463	Handle Ass'y.		32	06792	—463	Engine "U"-Channel Ass'y.—L.H.	
3	01166		Grip		33	712-0267		Hex Nut 5/16-18 Thd.	
4	710-0253		Hex Scr. 3/8-16 x 1.00 Lg.*		34	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.	
6	04602		"U" Clevis Pin .500" Dia.		35	06794	—463	Engine "U"-Channel Ass'y.—R.H.	
7	710-0451		Carr. Bolt 5/16-18 x .75" Lg.*		36	06806	—463	Handle Brkt.—R.H.	
8	04586	—463	"U"-Channel Plate		37	711-0599		Clevis Pin	
9	711-0231		Clevis Pin 1/2" Dia.		38	736-0119		L-Wash. 5/16" Scr.*	
10	04668	—463	Depth Bar		39	712-0267		Hex Nut 5/16-18 Thd.*	
11	732-0194		Spring Pin		40	06816	—463	"U"-Channel Brkt. Ass'y.	
12	732-0290		Depth Bar Spring		41	712-0267		Hex Nut 5/16-18 Thd.	
13	736-0119		L-Wash. 5/16" Scr.		42	04589	—463	Tail Piece Ass'y.	
14	714-0145		Inter. Cotter Pin 1/2" Dia.		43	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
15	712-0798		Hex Nut 3/8-16 Thd.*		44	736-0264		FI-Wash. .344 I.D. x .87 O.D.	
16	736-0169		L-Wash. 3/8" Scr.*		45	732-0108		Spring	
17	06805	—463	Handle Brkt.—L.H.		46	747-0271		Control Rod	
18	736-0105		Bell. Wash. 3/8" I.D.		47	711-0392		Ferrule	
19	710-0152		Hex Scr. 3/8-24 x 1.00" Lg.*		48	04810		Shift Lever Assembly W/Knob	
20	710-0118		Hex Sems Scr. 5/16-18 x .75" Lg.*		49	714-0145		Inter. Cotter Pin 1/2" Dia.	
21	736-0169		L-Wash. 3/8" Scr.*		50	746-0242		Throttle Control Complete (5 H.P.)	
22	712-0241		Hex Nut 3/8-24 Thd.*			746-0340		Throttle Control Complete (8 H.P.)	
23	736-0253		Belleville Wash. Hdn.		51	736-0242		Belleville Washer	
24	741-0116		Flange Brg. w/Flats .631 I.D.		52	736-0101		Flat Washer	
25	734-0736		Wheel Assembly 10.0 x 2.175		53	731-0189		Knob Throttle Control	
26	738-0318		Shld. Scr. .625" Dia. x 2.75" Lg. (1/2-20 Thd.)		54	736-0187		Flat Washer (hardened)	
	712-0267		Hex Nut 5/16-18 Thd.*						
	736-0119		L-Wash. 5/16" Scr.*						
29	736-0921		L-Wash. 1/2" Scr.*						
30	712-0200		Hex Elastic Insert Nut 1/2-20 Thd.						

*For faster service obtain standard nuts, bolts, and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(463—Top Flite Red) When ordering parts if color or finish is important, use the appropriate color code shown at left. (e.g. Top Flite Red Finish—04626 (463).)

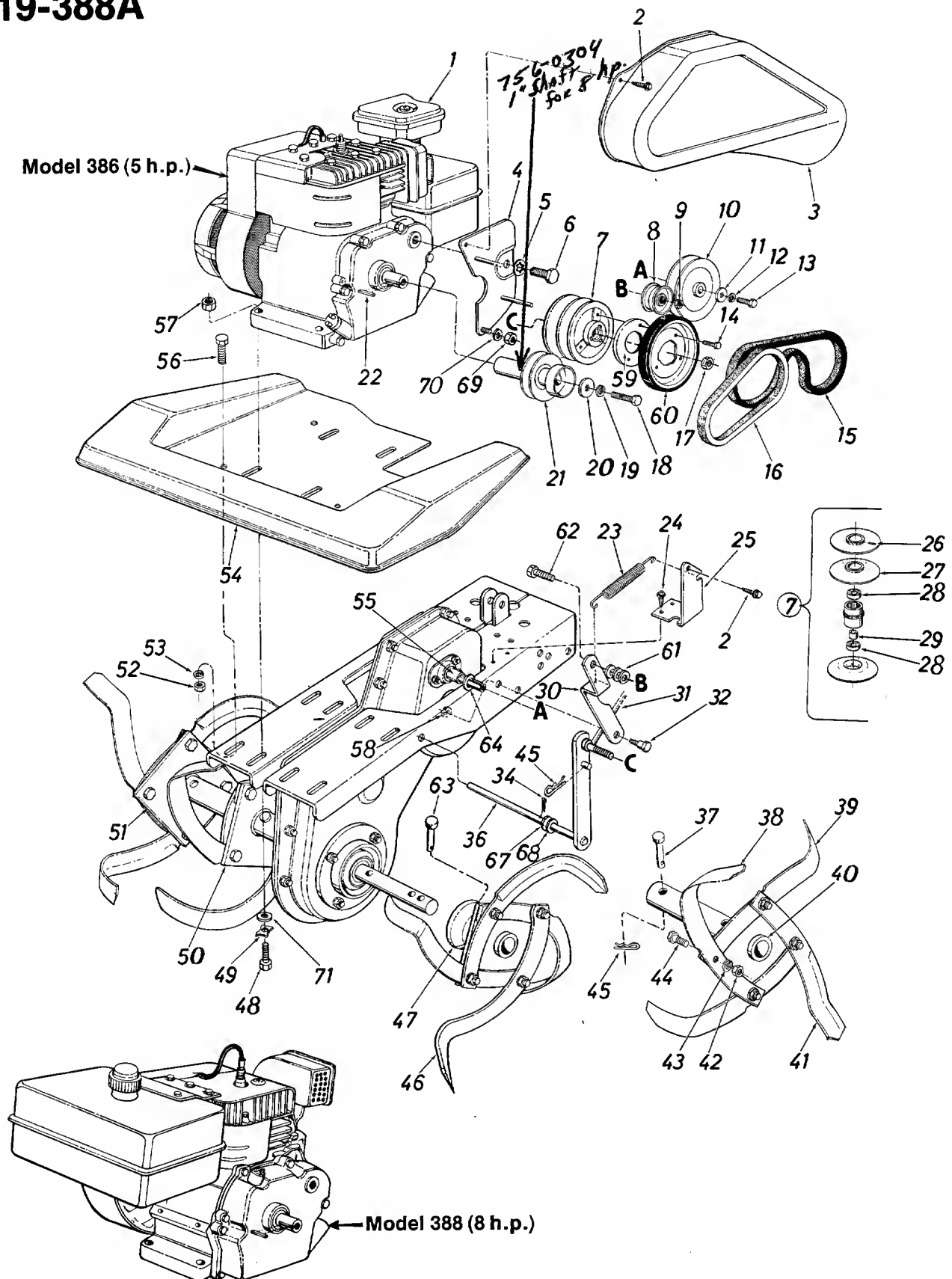
The engine is not under warranty by the tiller manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."



NOTE

This instruction manual covers various models and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

219-386A **219-388A**



PARTS LIST FOR MODELS 219-386A AND 219-388A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	5 H.P.		Engine—Briggs & Stratton (386A)		32	738-0140		Shld. Bolt .437 Dia. x .180	
	8 H.P.		Engine—Tecumseh (388A)		34	714-0115		Cotter Pin 1/8 Dia.	
2	710-0599		Thread Rolling Scr. 1/4-20 x .50" Lg.		36	04889		Pivot Arm Ass'y.	
3	04899	—312	Belt Cover		37	711-0599		Clevis Pin	
4	04896	—463	Front Belt Guard Support Ass'y.		38	742-0107		Tine—L.H.	
5	736-0114		Internal L-Wash. 1/2" Dia.		39	742-0108		Tine—R.H.	
6	710-0121		Hex Scr. 1/2-20 x .15 Spec.		40	04683		Outer Tine Adapter Ass'y.	
7	717-0390		Variable Speed Pulley		41	04289		Outer Tine Ass'y. Comp.—L.H.	
8	756-0313		Idle Pulley		42	712-0241		Hex Nut 3/8-24 Thd.*	
9	710-0116		Hex L-Nut 3/8-24 Thd.		43	736-0169		L-Wash. 3/8" Scr.	
10	756-0305		Pulley 4.50" Dia.		44	710-0191		Hex Scr. 3/8-24 x 1.25" Lg.	
11	736-0231		FI-Wash. 5/16 I.D. x 1.120" O.D.		45	714-0145		Inter. Cotter Pin 1/2 Dia.	
12	736-0119		L-Wash. 5/16" Scr.		46	06819		Inner Tine Ass'y. Comp.—L.H.	
13	710-0371		Hex Scr. 5/16-18 x .88" Lg.		47	06798		Inner Tine Adapter Ass'y.	
14	710-0230		Hex Cap Scr. 1/4-28 x .50 Lg.		48	710-0442		Hex Scr. 5/16-18 x 1.50" Lg.	
15	754-0231		V-Belt 1/2" x 28" Lg.		49	736-0170		Shake-Proof Washer	
16	754-0232		V-Belt 1/2" x 20" Lg. (5 H.P.)		50	06818		Inner Tine Ass'y. Comp.—R.H.	
	754-0233		V-Belt 1/2" x 21" Lg. (8 H.P.)		51	04290		Outer Tine Ass'y. Comp.—R.H.	
17	712-0200		L-Nut 1/2-13 Thd.		52	712-0267		Hex Nut 5/16-18 Thd.*	
18	710-0191		Hex Scr. 3/8-24 x 1.25" Lg.		53	736-0170		Shake-Proof Washer	
19	736-0169		L-Wash. 3/8" Scr.		54	04883	—463	Tine Shield	
20	736-0258		Flat Washer 3/8" I.D. x 1.00" O.D. (5 H.P.)		55	750-0229		Spacer .635 I.D. x .88 O.D. x 1.035 Lg.	
	736-0227		FI-Wash. .390 I.D. x 1.50" O.D. (8 H.P.)		56	710-0118		Hex Scr. 5/16-18 x .75" Lg.*	
1	756-0306		Engine Pulley 3.00 Dia. (5 H.P.)	N	57	712-0267		Hex Nut 5/16-18 Thd.*	
	756-0304		Engine Pulley (8 H.P.)		58	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
22	714-0133		Sq. Key 3/16 x 1.50" Lg. (5 H.P.)		59	09164		Reinforcement Plate	
	714-0118		Sq. Key 1/4 x 1.50" Lg. (8 H.P.)		60	04900		Friction Wheel Ass'y.	
23	732-0376		Extension Spring		61	736-0185		FI-Wash.	
24	710-0599		Hex Tapp. Scr. 1/4-20 x .50" Lg.		62	710-0459		Hex Hd. Scr. 3/8-24 x 1 1/2" Lg.	
25	04898	—463	Belt Guard Support—Rear		63	711-0679		Clevis Pin	
26	715-0124		Spring Pin Spiral 5/32 Dia. x .62" Lg.		64	736-0162		FI-Wash.	
27	10844		Sheave Half		67	736-0156		FI-Wash.	
28	741-0139		Ball Bearing		68	748-0198		Spacer	
29	750-0146		Spacer		69	712-0287		Hex Nut 1/4-20 Thd.	
30	04893		Idle Arm		70	736-0329		Flat Washer	
31	747-0271		Control Rod 3/8" Rod		71	736-0241		FI-Wash.	

*For faster service obtain standard nuts, bolts, and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(463—Top Flite Red) When ordering parts if color or finish is important, use color code shown at left. (e.g. Top Flite Red Finish—11907 (463).)

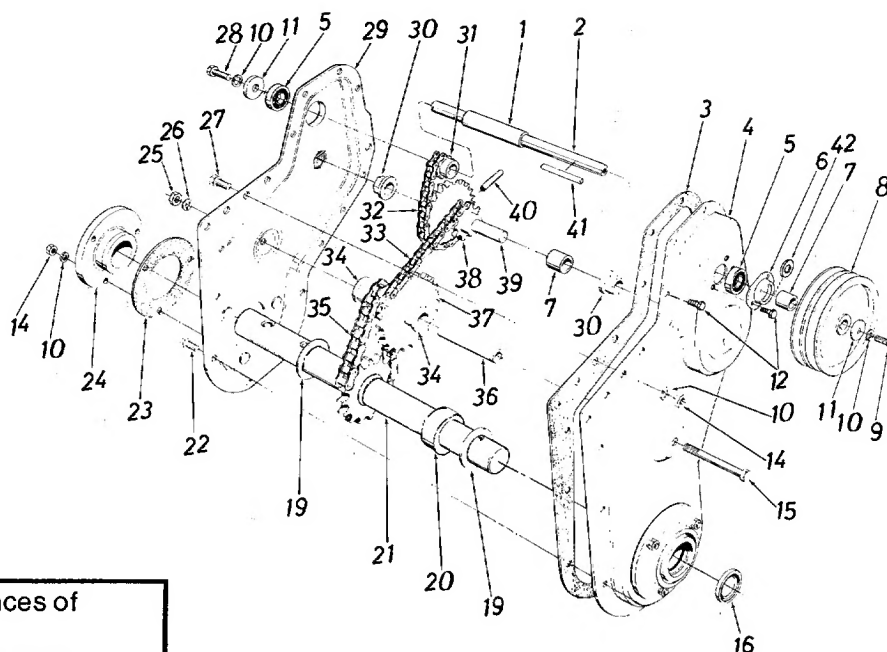
The engine is not under warranty by the tiller manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."



Chain Case Assembly 04907

219-386A

219-388A



NOTE: Use 16 ounces of
Plastilube #1
Order Part No. 737-0133

Parts List for Chain Case 04907

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PAP
1	750-0315		Spacer .657 I.D. x .78 O.D. x 2.19	N	24	741-0198		Bearing Housing Ass'y.	
2	738-0182		Jack Shaft		25	712-0798		Hex Nut 3/8-16 Thd.*	
3	721-0132		Gasket for Housing		26	736-0169		L-Wash. 3/8" Scr.*	
4	04887		Housing Half—L.H.		27	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.*	
5	741-0155		Ball Bearing .625 I.D. x 1.375 O.D.		28	710-0538		Hex Scr. 5/16-18 x .62" Lg. Special	
6	05034		Bearing Housing		29	04888		Housing Half—R.H.	
7	750-0229		Spacer .625 I.D. x .88 O.D. x 1.035		30	748-0229		Hex Flanged Bearing .630 I.D.	
8	756-0305		Chain Case Pulley 4.5" Dia.		31	713-0206		Sprocket 10 Teeth x .500 Pitch	
9	710-0371		Hex Scr. 5/16-18 x .88" Lg. Special		32	713-0131		#41 Chain 1/2" Pitch x 33 Links Endless	
10	736-0119		L-Wash. 5/16" Scr.*		33	713-0186		#42 Chain 1/2" Pitch x 48 Links Endless	
11	736-0231		FI-Wash. 5/16 I.D. x 1.125 O.D. x .125		34	748-0855		Flange Bearing .628 I.D.	
12	710-0599		Hex Wash. Hd. Self Tapp. Scr. 1/4-20 x .50" Lg.		35	713-0187		#50 Chain 5/8" Pitch x 28 Links Endless	
14	712-0267		Hex Nut 5/16-18 Thd.*		36	738-0320		Sprocket Shaft	
15	710-0644		Hex Scr. 3/8-16 x 3.25" Lg.		37	713-0182		Sprocket Bearing Sleeve Ass'y.	
16	721-0102		Oil Seal 1" I.D. x 1.357 O.D.		38	713-0181		Sprocket Sleeve Ass'y.	
19	736-0259		FI-Wash. 1.0" I.D. x 1.62 O.D. x .090		39	738-0308		Sprocket Shaft	
20	750-0314		Spacer 1.0" I.D. x 2.0" O.D. x .68		40	715-0114		Spring Pin Spiral 1/4" Dia. x 1.5" Lg.	
21	06800		Tine Shaft Ass'y.		41	714-0133		Sq. Key 3/16 x 1.50" Lg.	
22	710-0599		Thd. Rolling Scr. 1/4-20 x .50" Lg.		42	736-0162		FI-Wash.	
23	721-0133		Gasket for Bearing Hsg.						

*For faster service obtain standard nuts, bolts, and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

ACCESSORIES AVAILABLE FOR TILLER MODELS 219-386A AND 219-388A

299-160	Pneumatic Tire Kit
299-161	15" Sweep Plow
299-163	32" Leveling Rake
299-167	Hilling Plow (Must be used with 299-169 "V" Bar Frame Adapter)
299-168	Six Tang Cultivator (Recommended use of 299-191 Depth Gauge Wheels)
299-169	"V" Bar Frame Adapter (Recom- mended use of 299-191 Depth Gauge Wheels)
299-179	8" Furrow Opener
299-181	Aerator (Recommended use of 299-194 Wheel Weights in firm soil)
299-190	Four Shovel Cultivator (Must be used with 299-169 "V" Bar Frame Adapter)
299-191	Depth Gauge Wheels
299-192	Tine Cultivating Shields
299-194	Wheel Weights
299-195	Tire Chains
299-196	32" Angle Dozer Blade

PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all MTD manufactured power equipment are available through the authorized service firms listed below. All orders should specify the model number of your unit, parts number, description of parts and the quantity of each part required.

ALABAMA	BIRMINGHAM
Auto Electric & Carburetor Co.	2625 4th Ave. S. 35233
ARKANSAS	NORTH LITTLE ROCK
Sutton's Lawn Mower Shop	Rt. 4 Box 368 72117
	FORT SMITH
Mity Mite Motors, Inc.	2515 Towson Ave. 72901
CALIFORNIA	PORTERVILLE
Billious	75 North D Street. 93257
	SAN BERNARDINO
Lawn Mower Supply Co.	25608 E. Baseline 92410
	SAN FRANCISCO
J.W. Jewett Co.	981 Folsom St. 94107
	SACRAMENTO
Luttlig & Severson	2030 28th St. 95818
COLORADO	DENVER
South Denver Lawn Equip.	527 West Evans 80223
FLORIDA	JACKSONVILLE
Radco Distributors	2403 Market St. 32206
	CORAL GABLES
Moz-All of Florida, Inc.	365 Greco Ave. 33146
GEORGIA	EAST POINT
East Point Cycle & Key	2834 Church St. 30344
ILLINOIS	LYONS
Keen Edge Co.	8615 Ogden Ave. 60534
INDIANA	ELKHART
Parts & Sales Inc.	2101 Industrial Pkwy. 46514
IOWA	DUBUQUE
Power Lawn & Garden Equip.	2551 J.F. Kennedy ... 52001
LOUISIANA	NEW ORLEANS
Suhren Engine Co.	8330 Earhart Blvd. ... 70118
MARYLAND	TAKOMA PARK
Center Supply Co.	6867 New Hampshire Ave. 20012
MASSACHUSETTS	SPRINGFIELD
Morton B. Collins Co.	300 Birnie Ave. 01107
MICHIGAN	MOUNT CLEMENS
Power Equipment Dist.	36463 South Gratiot ... 48043
	LANSING
Lorenz Service Co.	2500 S. Pennsylvania . 48900
MINNESOTA	MINNETONKA
Hance Distributing Inc.	11212 Wayzata Blvd. ... 55343
	ST. PAUL
Power Tools Inc.	3771 Sibley Memorial Hwy. . 55122
MISSISSIPPI	BILOXI
Biloxi Sales & Service, Inc.	506 Caillavet St. 39533
MISSOURI	KANSAS CITY
Automotive Equip. Service	3117 Holmes St. 64109
	ST. JOSEPH
Ross-Frazier Supply Co.	8th and Monteray 64503
	ST. LOUIS
Henzler, Inc.	2015 Lemay Ferry Rd. . 63125
NEW JERSEY	BELLMAWR
Lawnmower Parts Inc.	717 Creek Rd., P.O. Box 7. 08030
	RUTHERFORD
Feld Distributor	28 Glen Rd. 07070
NEW YORK	CARTHAGE
Gamble Dist., Inc.	West End Ave. 13619

BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check yellow pages of your telephone directory under the list: Engines—Gasoline, Briggs & Stratton or Tecumseh Lauson.

	SYRACUSE
GTP Leisure Products Inc.	420 Marcellus St. 13204
NORTH CAROLINA	GREENSBORO
Dixie Sales Company	327 Battleground Ave. 27402
	GOLDSBORO
Smith Hardware Co.	515 N. George St. 27530
OHIO	WADSWORTH
National Central	687 Seville Rd. 44281
	CLEVELAND
Bleckrie, Inc.	7900 Lorain Ave. 44102
	CARROLL
Stebbe's Mid-State Mower Supply. Box 366-71 High St. . 43112	YOUNGSTOWN
Burton Supply Co.	1301 Logan Ave. Box 929 . 44501
OKLAHOMA	MUSKOGEE
Victory Motors, Inc.	605 S. Cherokee. 74401
	OKLAHOMA CITY
Forest Sales Inc.	1039 NW 63rd St. 73116
	ADA
Ada Auto Supply	301 E. 12th St. 74820
OREGON	PORTLAND
Kenton Supply Co.	8216 N. Denver Ave. . 97217
PENNSYLVANIA	CHESTER
Stull Equipment Corp.	742 W. Front St. 19013
	HARRISBURG
EECO Inc.	4021 N. 6th St. 17110
	PHILADELPHIA
Thompson Rubber Co.	5222-24 N Fifth St. ... 19120
	PITTSBURGH
Bluemont Co.	11125 Frankstown Rd. 15235
TENNESSEE	KNOXVILLE
Master Repair Service	2423 Broadway, N.E. . 37917
	MEMPHIS
Memphis Cycle & Supply Co.	421 Monroe Ave. 381
American Sales & Service, Inc. . 1922 Lynnbrook 381	
TEXAS	DALLAS
Marr Brothers, Inc.	423 E. Jefferson. 75203
	HOUSTON
Bullard Supply Co.	2409 Commerce St. 77003
	SAN ANTONIO
Catto & Putty, Inc.	P.O. Box 2408 78206
	FORT WORTH
Woodson Sales Corp.	1702 N. Sylvania 76111
UTAH	SALT LAKE CITY
A-1 Engine & Mower Co.	437 E. 9th St. 84111
VERMONT	BURLINGTON
Vermont Hdwe. Co. Inc.	180 Flynn Ave. 05401
VIRGINIA	RICHMOND
RBI Corp.	963 Myers St. 23260
WASHINGTON	SEATTLE
Bailey's Inc.	1414 14th Ave. 98122
WEST VIRGINIA	CHARLESTON
Young's, Inc.	233 Virginia St., E. ... 25301
WISCONSIN	APPLETON
Automotive Supply Co.	123 S. Linwood Ave. ... 54911

WARRANTY PARTS AND SERVICE POLICY

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES

1. Replacement of Missing Parts on new equipment.
2. Replacement of Defective Parts within the warranty period.
3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

1. Model Number of unit involved.
2. Date unit was purchased or first put into service.
3. Date of failure.
4. Nature of failure.